DEPARTMENT OF ENVIRONMENTAL QUALITY
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PROGRAMMATIC REVIEW/ ENVIRONMENTAL ASSESSMENT

Division/Bureau:

Permitting & Compliance Division, Water Protection Bureau, Water Quality Discharge Permits Section, Storm Water Program

Proposed Action:

Reissuance of the Montana Pollutant Discharge Elimination System (MPDES) *General Permit for Storm Water Discharges Associated with Mining and with Oil and Gas Activities* - Permit Number MTR300000 (hereafter referred to as the "General Permit"). Designated mining or oil and gas activities which meet certain criteria, as stated in federal and state law, will require authorization for storm water discharges under, and be subject to the requirements stated within, this General Permit.

MTR300000 was originally issued on May 18, 1992, reissued on September 1, 1997, and then reissued as the existing General Permit which was effective on November 17, 2002 and will expire on November 16, 2007. It is due to be reissued for the 2007-2012 General Permit cycle. Permittees covered under the existing General Permit typically reapply for renewed permit authorization. New applications are also processed during the five-year permit cycle. In accordance with ARM 17.30.1341(4), the Department will issue an authorization or notify the applicant that the source does not qualify for authorization under the General Permit within 30 days of receipt of a complete application.

Description of Proposal:

This General Permit is applicable to the discharge of storm water associated with mining and with oil and gas activities within the State of Montana, excluding Indian Reservations. "Storm water" is defined in ARM 17.30.1102(27). "Storm water discharge associated with mining and oil and gas activity" is defined in ARM 17.30.1102(30). In federal rule, the definition of "storm water discharge associated with industrial activity" includes mining and oil and gas activities. In Montana, ARM 17.30.1102(30) is a separate definition from that for "storm water discharge associated with industrial activity" which is stated in ARM 17.30.1102(29). However, ARM 17.30.1102(30) refers back to ARM 17.30.1102(29) for some similar requirements which are common to both definitions. The mining/oil and gas component was broken out into a separate definition from other industrial activities, and two different MPDES General Permits were developed, one for industrial activity and this

General Permit. It allows this General Permit to focus on more customized requirements related to the mining and oil and gas industry. In this document, the term "industry" or "industrial" is occasionally used interchangeably with "mining and oil and gas".

ARM 17.30.1102(30) is similar to ARM 17.30.1102(29) except it pertains to mining and oil and gas activities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts, or waste products located on the site of such operations. In general, such facilities include active and inactive mining operations, with a few exceptions as stated in ARM 17.30.1102(30). "Inactive mining operations" are also defined in ARM 17.30.1102(30).

Based on the ARM 17.30.1102(30) reference to requirements found in ARM 17.30.1102(29), for regulated mining and oil and gas activities under the formal rule definition, the term also includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process wastewaters (as defined in ARM 17.30.1102(20)); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

The preceding two paragraphs summarize what storm water discharge areas are subject to (eligible) for permit coverage under this General Permit. However, many specific types of active mining facilities or sites have similar identified areas which are subject to federal Effluent Limitation Guidelines (ELGs) with respect to storm water discharges. ELG requirements supercede the preceding two paragraphs when applicable and will be discussed more below.

Discharges subject to federal ELGs as adopted by the Montana Board of Environmental Review in ARM Title 17, Chapter 30, Subchapter 12 would have to be covered under a separate Individual MPDES permit. ELGs for active mining activities include those for coal mining [40 CFR Part 434], mineral mining and processing [40 CFR Part 436], and ore mining and dressing [40 CFR Part 440].

The applicant must refer to pertinent regulations and determine what storm water discharges are eligible for permit coverage under the General Permit, and what storm water discharges are subject to ELGs and would be permitted under a separate Individual MPDES permit. In general, for mining activities subject to ELGs, ineligible storm water discharges under the General Permit would include any storm water which comes into contact with the active mine area, including land application sites, ore, waste rock, haul roads, tailings storage, or any areas that store or handle mill process wastes. These areas are often similar to those

areas specified above. In Attachment A of this General Permit, the Department has included a table which exemplifies the applicability of 40 CFR Part 440 ELGs to discharges from active ore (metal) mining and dressing sites.

The applicant will need to evaluate their mining facility or site with respect to the applicability of the General Permit and it's various requirements. This includes clearly identifying eligible storm water discharges and associated information in the Storm Water Pollution Prevention Plan.

Based on the aforementioned areas at mining and oil and gas activity sites, characteristic storm water effluent discharge may contain pollutants which pose a threat to receiving surface waters. In general, studies performed over the past twenty-five years and historical monitoring data have indicated industrial activity storm water runoff may carry higher than normal annual loadings of total suspended solids (TSS), chemical oxygen demand (COD), metals, oil & grease, nutrients, and other organic chemicals/compounds. Pollutant concentrations may vary considerably with respect to industrial activity type, storm events, and location. For mining activity sites, TSS is of most concern, as well as metals.

Pursuant to 75-5-605(2) Montana Code Annotated (MCA) of the Montana Water Quality Act (MWQA), the discharge of wastes to state waters without a current permit authorization from the Department is prohibited. Sediment and other materials are defined as "other wastes" in 75-5-103(19) MCA. "Pollutants" are defined in ARM 17.30.1102(19). "Discharge of a pollutant", as defined in ARM 17.30.1102(2), results when pollutants come into contact with storm water discharges from the industrial activity site. "Point source" is defined under ARM 17.30.1102(18). ARM 17.30.1105 requires point source discharges of storm water associated with mining and oil and gas activity to obtain MPDES permit coverage.

Pursuant to 75-5-402, MCA and requirements found in ARM , Title 17, Chapter 30, Subchapter 11, the Department regulates storm water discharges associated with mining and oil and gas activities. ARM 17.30.1105(1)(c) requires MPDES permit coverage for mining and oil and gas facilities and/or activities identified in ARM 17.30.1102(30). Additionally, point source discharges could require MPDES permit coverage under ARM 17.30.1105(e) and/or (f) if the Department determines that storm water controls are needed based on wasteload allocations that are part of Total Maximum Daily Loads (TMDLs) that address the pollutants of concern, or if the Department determines the discharge is contributing to a violation of a water quality standard or is a significant contributor of pollutants to surface waters.

The following conditions must be met to qualify for written authorization to discharge storm water under the General Permit:

A. "Storm water discharge associated with industrial activity" is defined by 40 Code of Federal Regulations (CFR), Part 122.26(b)(14). The State of Montana has adopted the types of industrial activities stated in 40 CFR through ARM 17.30.1102(29) and

ARM 17.30.1102(30) in consideration of our delegated responsibilities through EPA. This definition typically includes specified industrial activities based on the primary Standard Industrial Classification (SIC) Code as listed in the federal "1987 Standard Industrial Classification Manual" (or the type of industrial activity in the absence of an identified SIC Code).

More specifically, this General Permit pertains to the following:

1. Discharges of storm water from mining and milling activities (including active, inactive, or abandoned mine and mill sites) with SIC Code Major Groups 10, 12, and 14. This General Permit does not cover those activities or discharges that are subject to ELGs for mining activities. ELGs exist for coal mining [40 CFR Part 434], mineral mining and processing [40 CFR Part 436], and ore mining and dressing [40 CFR Part 440].

2. Storm water discharges from oil and gas activities with SIC Code Major Group 13, to include: oil and gas exploration, production, processing, treatment operation, or transmission facilities. This General Permit does not cover oil refineries. As stated in ARM 17.30.1106(b), an MPDES permit authorization is not required for existing or new discharges composed entirely of storm water from oil or gas exploration, production, processing, or treatment operations, or transmission facilities, unless the operation or facility:

    a. has had, at any time since November 16, 1987, a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 (Discharge of Oil), 40 CFR 117.21 (Notice of Discharge of a Reportable Quantity), or 40 CFR 302.6 (Notification Requirements, Hazardous Substances);

    b. contributes to a violation of a water quality standard; or,

    c. has a "storm water discharge associated with construction activity", as defined in ARM 17.30.1102(28).

B. A discharge of storm water occurs from a facility or activity to state surface waters or a drainage system which carries storm water to state surface waters.

C. The storm water discharge consists of runoff only from precipitation events, either rainfall or snowmelt, and is not mixed with process wastewater.

Analytical monitoring data will be reported to the Department using the Department's Discharge Monitoring Report Form (DMR), and entered into the Department's Integrated

Compliance Information System (ICIS) database. Biannual sampling will be reported by January 28th and July 28th of each calendar year.

The General Permit also includes some new conditions pertaining to Water Quality Standards, discharges into listed impaired waterbodies on the State's 303(d) list, and Total Maximum Daily Load-based Waste Load Allocations.

Pursuant to ARM 17.30.1116, discharges composed entirely of storm water are not regulated as discharges associated with mining and oil and gas activity if there is no exposure of industrial materials and activities to rain, snow, snowmelt, and/or runoff, and the discharger satisfies the conditions of this Industrial No-Exposure Certification rule. Consequently, permit authorization for storm water discharges normally regulated under the General Permit would not be necessary and owners/operators would submit a complete "Industrial No Exposure Certification Form" to the Department instead. The Department has developed a standard form for this which must be used.

Benefits and Purpose of Proposal:

The purpose of the issuance of this General Permit, other than satisfying federal and state rules, is to regulate the storm water discharges from a mining or oil and gas facility or activity. The primary benefit of permitting storm water discharges from a mining or oil and gas facility or activity is to require the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) including the numerous Best Management Practices (BMPs) which are developed and implemented through the SWPPP.

To elaborate, as the effluent characteristics of storm water runoff can be highly variable and unpredictable, ARM 17.30.1345(1) and 17.30.1344 provide for the use of BMPs where effluent limitations are infeasible. The Department has concluded that the most prudent, reasonable land, soil and water conservation practices, to protect surface waters of the state will be achieved through the development and implementation of the SWPPP as defined in ARM 17.30.1102(31). SWPPP submittal is a required component of the permit application procedure pursuant to ARM 17.30.1110(7). This SWPPP identifies site characteristics, potential pollutants, and various Best Management Practices (BMPs) to minimize or prevent pollutants from entering storm water runoff and/or receiving surface waters. Development and implementation of a SWPPP is critical to MPDES storm water discharge permitting.

It is the Department's position that Montana's surface water quality standards can be maintained through the development and implementation of a SWPPP. SWPPP requirements are based on historical guidance and permits used by the EPA, other states, and the experience of the Montana MPDES program. The SWPPP allows for an iterative approach to BMP implementation whereby BMP effectiveness is tracked and improvements are made as necessary. The BMPs help minimize or eliminate the generation or migration of pollutants to surface waters. In addition, permittees will be prohibited from discharging process wastewater under this General Permit.

Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider:

1. Issuance of the General Permit

Authorizations under this General Permit do not authorize the mining or oil and gas activity itself, but authorize storm water discharges associated with specified types of mining or oil and gas activity. Through federal and state law, environmental regulation is mandatory with respect to these storm water discharges. Through the same federal and state laws pertaining to storm water discharges, the issuance of a General Permit is the typical regulatory mechanism to institute appropriate controls. A General Permit is typically issued for a category of point sources, such as storm water discharges from mining or oil and gas activities, which have substantially similar types of potential wastes/pollutants, operations, effluent limitations, monitoring, BMPs, and/or standard requirements.

ARM 17.30.1110(5) requires that a SWPPP be submitted with a completed application in order to obtain coverage under the General Permit. The proposed General Permit provides more specific SWPPP requirements. The SWPPP describes the site characteristics and potential sources of storm water pollution, as well as implementation of BMPs to minimize the discharge of pollutants that come into contact with storm water runoff.

2. No Action Alternative

This MPDES General Permit requires permittees to develop, implement, and enforce their SWPPP. The SWPPP identifies site characteristics, potential pollutants, and various BMPs to minimize or prevent pollutants from entering storm water runoff and/or receiving state surface water.

Without coverage under an MPDES storm water discharge permit, when a potential problem pollutant discharge occurs, the Department's response would be limited to enforcement actions after the fact. Such enforcement actions would have a deterrent effect on future discharges, but would not be as effective as permit coverage to minimize pollution in the first place. If an MPDES storm water discharge permit were not issued, there would be an increased potential for pollution from storm water runoff since BMPs and control measures would be less adequately addressed.

3. Issuance of an Individual MPDES Permit

Another alternative would be to require operators which would otherwise be covered under this General Permit to apply for and obtain an MPDES Individual permit.

Individual MPDES permits typically include specific facility effluent limits and treatment requirements, and are typically issued for process wastewater or similar discharges.

Authorizations issued under this General Permit do not cover process wastewater discharges. Due to flow rates being so variable for storm water (precipitation and/or snowmelt) discharges, and because the storm water discharge may only potentially contain pollutants which have come into contact with the storm water runoff, it is technically impractical to calculate technology-based and/or water quality-based effluent limits. Therefore, based upon "Best Professional Judgement", the development of a SWPPP and the use of BMPs is the most appropriate type of control for this point source category. The most prudent, reasonable land, soil, and water conservation practices to protect surface waters of the state will be achieved through the development and implementation of this SWPPP. BMPs should be the most cost-effective means of either removing the source pollutants or eliminating contact between potential pollutants and storm water discharges associated with mining or oil and gas activity.

Based upon the aforementioned considerations and to accomplish the desired goals, the issuance of MPDES Individual permits for each mining or oil and gas activity which include specific effluent limits and treatment requirements is not pertinent. The Department has concluded that in this case, Individual permits would be similar to the proposed General Permit in that they would require the development, implementation, and enforcement of a SWPPP and the use of BMPs. Issuing an Individual permit provides little additional benefit in terms of resource protection.

In conclusion, and in consideration of the facts stated above, no prudent or reasonable alternatives are available other than the issuance of the General Permit.

Listing and appropriate evaluation of mitigation, stipulations and other controls enforceable by this or another government agency:

Authorizations under this General Permit are issued for mining or oil and gas activities which may be affected and regulated through other applicable federal, state, or local law, rule, standard, ordinance, or order. This General Permit is based on MPDES regulatory authority and institutes controls which pertain to the appropriate management of storm water discharges due to mining or oil and gas activity. Requirements associated with other enforceable documents may overlap or supplement these controls.

Affected Environment and Impacts of the Proposed Project:

The following symbols are used in the table below.

Key to Ranking	
NA	Not applicable
N	No effects
B	Potentially beneficial effects
C	Potentially minor adverse effects
A	Potentially major adverse effects
M	Corrective action required
P	Additional permits will be required

NOTE: The following table reflects potential effects from authorizations for storm water discharges from the mining or oil and gas activity under the General Permit and implementation of BMPs required by the General Permit. It does not pertain to other potential environmental, or other, effects from the mining or oil and gas activity itself, whether existing or new. Additionally, for the considerations stated below, "Corrective action required" (Rank "M") was not listed under each consideration as the factors which may trigger corrective action are specific to the mining or oil and gas activity authorization and unknown future circumstances. The General Permit does contain requirements, primarily through compliance with the SWPPP, which require BMPs, BMP maintenance, and associated corrective action as necessary. Essentially, the implementation of the SWPPP's BMPs is corrective action in many circumstances.

Rank	Consideration	Remarks
	PHYSICAL AND BIOLOGICAL ENVIRONMENT	
B, C	1. SOIL SUITABILITY, TOPOGRAPHIC AND/OR GEOLOGIC CONSTRAINTS (soil moisture, unstable soils or geologic conditions, steep slopes, erosion potential, subsidence potential, seismic activity)	The long-term effect on soil suitability, topographic and/or geologic constraints should be beneficial with respect to minimizing the potential for pollutants (including sediment) to come into contact with storm water runoff. Permitting actions under this General Permit will require the characterization of potential pollutants to storm water, Best Management Practices (BMPs) to be developed and implemented to alleviate the potential for pollutants to come into contact with storm water runoff, and other requirements to improve existing or background threats prior to the issuance of authorization under this General Permit. This typically includes measures to minimize erosion and slope stability threats which could introduce potential pollutants (including sediment) into storm water runoff as necessary. However, the development and implementation (such as construction) of BMPs could temporarily create minor adverse effects based upon this consideration, but the long-term net effect would still typically be beneficial. Implementation of BMPs could also have a very minor effect on soil moisture content at the mining or oil and gas activity site by modifying drainage, and consequently, subsurface infiltration.

N	2. HAZARDOUS FACILITIES (power lines, hazardous waste sites, distances from explosive and flammable hazards including chemical/petroleum storage tanks, underground fuel storage tanks and related facilities such as natural gas storage facilities and propane tanks)	Authorization to discharge storm water under this General Permit should have no effect on hazardous facilities other than potential beneficial effects from the development of the Storm Water Pollution Prevention Plan (SWPPP) and related BMPs, particularly to alleviate hazardous substances from potentially coming into contact with storm water. Also, discharges authorized under this General Permit are restricted from having any process wastewater discharges and are required to be strictly storm water-related discharges.
B, C	3. AIR QUALITY (effects to or from project, dust, odors, emissions)	Through the implementation of a SWPPP and associated BMPs there are potential beneficial effects to air quality through the proper handling and management of potential pollutants. Typically, any adverse effects would be minor and would be associated with the implementation of BMPs, such as dust created during any BMP construction activities.
B, C	4. GROUNDWATER RESOURCES & AQUIFERS (quality/nondegradation, quantity/reliability, distribution, uses/rights, number of aquifers, mixing zones)	This General Permit does not pertain to discharges of storm water (and any potential wastes/pollutants) into ground water. The general storm water management controls and the BMPs which are implemented at the facility can affect the recharge of ground water through infiltration. A potentially beneficial effect would be these BMPs keeping potential pollutants from entering ground water, but depending on the BMPs used, the opposite effect could occur with a minor adverse effect (such as potentially contaminated storm water due to a spill being directly introduced into the subsurface environment). However, this General Permit does not regulate storm water discharges to ground water. By implementing BMPs, primarily through the use of storm water detention/retention structures and/or the development of relatively impervious surfaces, the recharge to ground water in the immediate vicinity of the facility could be altered and/or reduced. It could allow more evaporation and/or evapotranspiration of precipitation/snowmelt runoff instead of infiltration and recharge to ground water. This could be interpreted as an adverse effect, but overall, is likely to have a negligible effect on the quantity and use of ground water resources locally. During the construction and/or implementation of BMPs, it is possible to have a minor adverse effect on this consideration.
B, C	5. SURFACE WATER RESOURCES (quality/nondegradation, quantity/reliability, distribution, uses/rights, storm water controls, source of community supply, community treatment, mixing zones)	With authorization under this General Permit, and through the development of the SWPPP and implementation of BMPs, the effect is likely to be beneficial to surface water quality in that potential pollutants would have less of a chance of reaching receiving surface waters through storm water runoff. However, the potential for pollutants to be exposed to storm water is typically an inherent possibility and could potentially have an adverse effect on receiving surface water quality. Since nondegradation requirements apply to new and increased sources, the impact to surface water quality would be minor. The purpose of authorization under this General Permit is to alleviate that potential adverse effect, but it does potentially exist. This potential adverse effect could pertain to water uses and rights as well. The effect on the quantity of surface water through the implementation of BMPs, similar to that expressed above for ground water, could be interpreted as a minor adverse effect through potentially reducing the localized recharge to surface water , and/or by the detention/retention of storm water runoff. As stated for ground water, even though this could be interpreted as an adverse effect, overall it is likely to have a negligible effect on the quantity and use of surface water resources locally. During the

		construction and/or implementation of BMPs, it is possible to have a minor adverse effect on this consideration.
B, A	6. VEGETATION AND WILDLIFE SPECIES AND HABITATS, INCLUDING FISHERIES AND AQUATIC RESOURCES (threatened, endangered, sensitive species, prime habitat, population stability, potential for human wildlife conflicts, effectiveness of post-disturbance plans)	With the development of the SWPPP and associated BMPs, the facility will have the potential beneficial effect of reducing the potential for pollutants to be discharged into the environment, and in particular, storm water runoff. With respect to this Vegetation and Wildlife Species and Habitats consideration, the BMPs should help maintain existing conditions. Implementing BMPs may also create new habitats (such as ponds and/or wetlands) and/or provide new or improved vegetation (such as providing an erosion resistant new grass-mixture seeding while removing some noxious weeds which were observed, and consequently improving the type and amount of insects and subsequent species up the food chain). Potentially adverse effects could include the temporary and/or permanent alteration of site conditions when implementing BMPs. During the construction and/or implementation of BMPs, it is possible to have an adverse effect on this consideration. If rare plants, or threatened or endangered species are present, the effect could be significant.
B, A	7. UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES (biologic, topographic, wetlands (within one mile), floodplains (within one mile), scenic rivers, natural resource areas, etc.)	With the development of the SWPPP and associated BMPs, the facility will have the potential beneficial effect of reducing the potential for pollutants to be discharged into the environment, and in particular, storm water runoff. With respect to this Unique, Endangered, Fragile, or Limited Environmental Resources consideration, the BMPs should help maintain existing conditions. Implementing BMPs may also create new habitats (such as ponds and/or wetlands) and/or provide new or improved vegetation (such as providing an erosion resistant new grass-mixture seeding while removing some noxious weeds which were observed, and consequently improving the type and amount of insects and subsequent species up the food chain). Potentially adverse effects could include the temporary and/or permanent alteration of site conditions when implementing BMPs. During the construction and/or implementation of BMPs, it is possible to have an adverse effect on this consideration. If rare plants, or threatened or endangered species are present, the effect could be significant.
B, C	8. LAND USE (waste disposal, agricultural lands [grazing, cropland, forest lands, prime farmland], recreational lands [waterways, parks, playgrounds, open space, federal lands), access, commercial and industrial facilities [production & activity, growth or decline], growth, land-use change, development activity)	Authorization under this General Permit, and implementation of the associated SWPPP and BMPs should have at least a minor beneficial effect on the success of the mining or oil and gas activity facility (production, activity, growth) by implementing measures to reduce or eliminate threats to the public health and/or the environment, primarily through potential pollutant releases into storm water runoff. Without potential pollutants being released and possible contamination issues through the development and implementation of pollution prevention measures, the mining or oil and gas activity will benefit. A very minor amount of land on the mining or oil and gas activity site may have to be used to implement BMPs. Consequently, during the construction and/or implementation of BMPs, it is possible to have a minor adverse effect on this consideration..
A	9. HISTORICAL, CULTURAL, & ARCHEOLOGICAL (sites, facilities, uniqueness, diversity)	The General Permit requires BMPs to be developed and implemented to control and/or treat storm water runoff. During construction of these BMPs, subsurface artifacts may be encountered. The potential adverse effects, as with any

		construction project, could be not being aware of any potential artifacts, not being able to work and/or design around artifacts, the potential destruction of artifacts, and/or the displacement/removal of artifacts. In conclusion, during the construction and/or implementation of BMPs, it is possible to have an adverse effect on this consideration. If historical, cultural, or archeological resources are present, the effect could be significant.
B, C	10. AESTHETICS (visual quality, nuisances, odors, noise)	The aesthetics associated with authorization under this General Permit should improve, and have a beneficial effect. The development of a SWPPP and implementation of BMPs should result in a cleaner, more attractive, mining or oil and gas activity site. This would be accomplished by not only improvements to control storm water runoff, but in measures to improve the management and handling of materials and operations which could better help keep potential pollutants out of the environment. A potential minor adverse effect would be the construction of the BMPs. These adverse effects could be both temporary (dust, noise, visual), as well as permanent. The most expected permanent effect would be the construction of structures and storm water management BMPs in a physical setting where completely undeveloped ground existed before. In conclusion, during the construction and/or implementation of BMPs, it is possible to have a minor adverse effect on this consideration.
B, C	11. DEMANDS ON OR CHANGES IN ENVIRONMENTAL RESOURCES INCLUDING LAND, WATER, AIR, OR ENERGY USE (need for new or upgraded energy sources, potential for recycling, etc.) {See (4), (5), and (8).}	Authorization under this General Permit should have a largely beneficial effect on environmental resources by implementing BMPs which will help characterize potential sources of pollution at the mining or oil and gas activity site, and evaluating and implementing measures to reduce these potential sources. This could potentially include waste reuse, reduction, recycling, and/or treatment. Potentially very minor adverse effects would include temporary and/or permanent effects with a higher use of water (washing), land (construction of BMPs), and/or energy (construction and operation of some BMPs). However, an opposite beneficial effect could also occur through improvements in the operation of the facility by BMPs eliminating and/or reducing these demands (such as by eliminating potential spills, waste generation, and the use of environmentally-friendly and more energy-efficient equipment).

Rank	Consideration	Remarks
IMPACTS ON THE HUMAN POPULATION		
N	12. CHANGES IN DEMOGRAPHIC CHARACTERISTICS (population quantity, distribution and density, rate of change)	NA
N	13. GENERAL HOUSING CONDITIONS (quality, quantity and affordability)	NA
N	14. POTENTIAL FOR DISPLACEMENT OR RELOCATION OF BUSINESS OR RESIDENTS	NA
N	15. PUBLIC HEALTH AND SAFETY (medical services and facilities, police, fire protection and hazards [see (2)], emergency medical services [see (8), LAND USE for waste disposal])	There should be little to no effect on Public Health and safety other than insuring the facility SWPPP and associated BMPs are implemented and maintained, and the inherent risks associated with the construction and operation of these. Some BMP construction activities, as well as the development and operation of BMPs (such as retention/detention structures) could pose a minor risk to untrained and/or unfamiliar parties. Training and access control measures should help alleviate these concerns.
B	16. LOCAL EMPLOYMENT AND INCOME PATTERNS (quantity and distribution of employment, economic impact)	Authorizations under the General Permit, and the development and implementation of the SWPPP and BMPs will require facility personnel, consultants, and various local services resulting in a probable minor increase in local employment and the economy.
N	17. LOCAL AND STATE TAX BASE AND REVENUES	NA
N	18. EFFECTS ON SOCIAL STRUCTURES AND MORES (social conventions/standards of social conduct), DEMANDS ON SOCIAL SERVICES (law enforcement, educational facilities [libraries, schools, colleges, universities], welfare, etc.)	NA
N	19. TRANSPORTATION NETWORK (condition and use of roads, traffic flow conflicts, rail, airport compatibility, etc.)	NA
N	20. CONSISTENCY WITH LOCAL ORDINANCES, RESOLUTIONS, OR PLANS (conformance with local comprehensive plans, zoning or capital improvement plans)	It is possible for local governments and/or groups to have current and/or future ordinances, resolutions, or plans which pertain to the management of storm water runoff. However, as this Department action is for the renewal of a General Permit, and based upon previous Department experience, there should be little to no effect with respect to this Consistency with Local Ordinances, Resolutions, or Plans consideration.

N	21.	REGULATORY RESTRICTIONS ON PRIVATE PROPERTY RIGHTS (*Are we regulating pursuant to a police power? Does the Agency action restrict the use of the property beyond the minimum necessary to achieve compliance with the Act? What are the costs of such additional restrictions resulting from proposed permit conditions? Are there other, less restrictive ways of achieving the same goal?* See your assigned legal counsel for assistance preparing this section.)	This Programmatic Review, in the form of an Environmental Assessment, is intended to cover the authorizations issued under this General Permit. The issuance of authorizations under this General Permit is regulating pursuant to a police power. The Agency is not restricting the use of the property beyond the minimum necessary to achieve compliance with the Montana Water Quality Act. Consequently, there will be no additional costs from such restrictions. There are not less restrictive ways of achieving the same goal. Authorizations under the General Permit essentially require the permittee to evaluate potential pollutants which could potentially come into contact with storm water, and to implement measures to help insure this does not happen. The implementation of BMPs is the least onerous and restrictive approach in regulating storm water discharges from mining or oil and gas activity sites.

Other groups or governmental agencies contacted or which may have overlapping jurisdiction:

The Environmental Protection Agency also regulates the discharges of storm water from similar mining or oil and gas activities that are located on Indian Reservations. Various other federal, state and local permits, ordinances, orders, judgments, or decrees may also pertain to activities covered under this General Permit, but not necessarily to discharges of storm water.

Individuals or groups contributing to this Programmatic Review:

Historical storm water permits, staff, and experience within the Department's Water Protection Bureau.

Summary of Issues:

This General Permit is being issued to allow authorizations to mining or oil and gas activities which will incorporate a Storm Water Pollution Prevention Plan and Best Management Practices to help keep potential pollutants from entering storm water discharges, and eventually state surface waters.

Summary of Potential Effects:

The effects of the proposed issuance of the General Permit would be to eliminate or minimize impacts to water quality caused by storm water runoff. Through the development and implementation of a SWPPP and associated BMPs, the General Permit should ultimately beneficially effect the water quality of state surface waters which receive the site's storm water discharge, when compared with effects and conditions in the absence of this General Permit.

Potential adverse effects associated with the proposed re-issuance of the General Permit will typically be minor and not significant. These effects are typically caused by the

construction of the BMPs (relatively small and localized in extent) and may be short term in length (construction period).

Because discharges authorized by the General Permit must meet Water Quality Standards and Nondegradation requirements, no significant water quality impacts will occur. The only types of impacts that have the remote potential to be significant are those created by the construction and/or implementation of BMPs which are performed as a result of the authorization under the General Permit. Those impacts may concern the following areas based on the considerations listed in the chart above:

1. VEGETATION AND WILDLIFE SPECIES AND HABITATS, INCLUDING FISHERIES AND AQUATIC RESOURCES;
2. UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES; AND
3. HISTORICAL, CULTURAL, & ARCHEOLOGICAL

These impacts will almost always be minor.

The Department completes an Environmental Assessment (EA) for new applications for authorization (not renewals) under the General Permit when submitted and processed during the five-year General Permit cycle. Further environmental analysis, up to a potential Environmental Impact Statement, will be necessary only when the extraordinary circumstance occurs whereby it is determined there is a major adverse effect to one or more of the three considerations stated above which results in a significant impact.

For new applications which pertain to mining or oil and gas facilities that do not exist and will be constructed and initiating operation, the Department will evaluate the following two Programmatic Review questions in order to assess impacts to the above three considerations, as a part of the EA:

1. Does the new construction and/or implementation of BMPs have an effect on Unique, Endangered, Fragile, or Limited Environmental Resources? In answering this question, the DEQ will utilize the Montana Natural Heritage Program and the Natural Resource Information System (NRIS); and

2. Does the new construction and/or implementation of BMPs have an effect on Historical, Cultural, and Archeological Resources? In answering this question, the DEQ will utilize the Montana State Historic Preservation Office (SHPO).

For new authorization applications, and based upon the findings with respect to the aforementioned two questions, the DEQ will determine whether the submitted application qualifies for issuance under this Programmatic Review. If, for a new authorization, both questions are answered in the negative, the authorization is categorically excluded under ARM 17.4.607(4)(a). If the answer to either of the questions is affirmative, then further environmental analysis, up to a potential Environmental Impact Statement, must be prepared.

Cumulative Effects:

The issuance of this General Permit should have little to no cumulative effect. Numerous authorizations are issued under the General Permit which have potential relatively minor effects individually, and are relatively spread out geographically over the entire state of Montana. Additionally, the majority of authorizations are issued to existing mining or oil and gas activities which have received similar authorization under previous General Permits. Storm water quality, and consequently receiving state surface water quality, will be improved with the issuance of this General Permit.

Recommendation:

Issue this General Permit.

Recommendation for Further Environmental Analysis:

__ Prepare an Environmental Impact Statement
__ Prepare a detailed Environmental Assessment
X No further analysis for issuance of General Permit; review of factors above for new authorizations issued under this General Permit

This Programmatic Review was prepared by Brian Heckenberger in September, 2007

Approved by:

Bonnie Lovelace, Chief
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Date